

THE PALM LEAF SKELETONIZER, HOMALEDRA SABALELLA (CHAMBERS)^{1/}

(MOMPHIDAE - LEPIDOPTERA)

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INTRODUCTION: THE PALM LEAF SKELETONIZER IS THE LARVA OF A SMALL MOTH. BOTH UPPER AND LOWER SURFACES OF THE LEAF ARE SUBJECT TO ATTACK BY THE LARVAE. THE LARVA IS THE ONLY DESTRUCTIVE STAGE OF THIS INSECT (FIG. 1).



FIG. 1

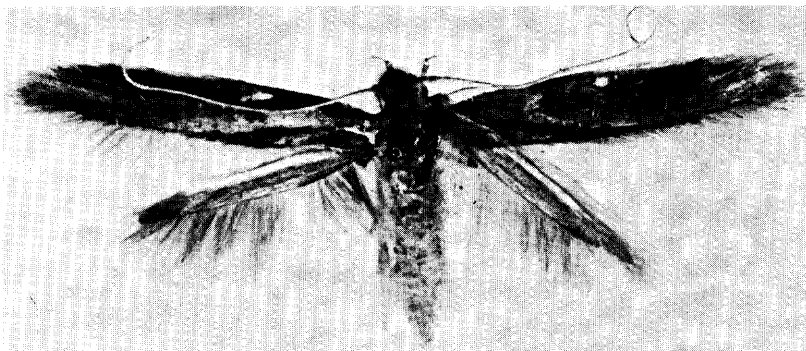
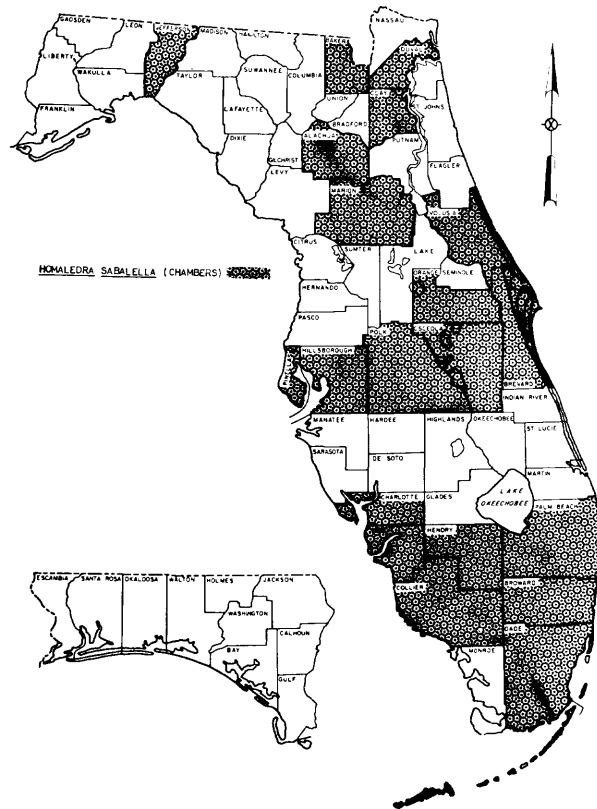
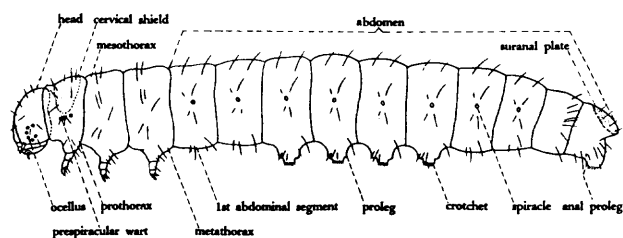


FIG. 2

DESCRIPTION: THE LAST STAGE LARVA IS ABOUT 5/8 INCH LONG, SLENDER AND SUBCYLINDRICAL (FIG. 1). THE GROUND COLOR IS WHITE TINTED WITH YELLOW. THE HEAD AND CERVICAL SHIELD ARE DARKER YELLOW, MANDIBLES BROWN. EXTENDING FROM PROTHORAX TO THE LAST SEGMENT OF THE ABDOMEN, EQUIDISTANTLY PLACED, ARE EIGHT NARROW, IRREGULAR, REDDISH BROWN STRIPES (SEE SCHEMATIC DIAGRAM). THE ADULT IS BEIGE IN COLOR WITH A WING EXPANSE OF ABOUT 5/8 INCH; TWO MINUTE BLACK SPOTS ARE PRESENT TOWARD THE HIND MARGIN OF EACH FOREWING (FIG. 2).

HOSTS: ONLY PLANTS IN THE FAMILY PALMACEAE ARE KNOWN TO BE HOSTS OF THIS INSECT. IT HAS BEEN RECORDED ON THE FOLLOWING HOSTS IN FLORIDA: BUTIA CAPITATA (MART.) BECC., BUTIA PALM; COCOS NUCIFERA L., COCONUT PALM; LATANIA LODDIGESII MART., LATANIA PALM; PHOENIX CANARIENSIS HORT. EX CHABAUD, CANARY ISLAND DATE PALM; PHOENIX DACTYLIFERA L., TRUE DATE PALM; PHOENIX RECLINATA JACQ., SENEGAL DATE PALM; PHOENIX RUPICOLA T. ANDERS., CLIFF DATE PALM; PHOENIX SYLVESTRIS (L.) ROXBG., WILD DATE PALM; SABAL MINOR (JACQ.) PERS., DWARF OR BUSH PALMETTO; SABAL PALMETTO (WALT.) LODD., CABBAGE PALMETTO; SERENOA REPENS (BARTR.) SMALL, SAW PALMETTO; WASHINGTONIA ROBUSTA WENDL., MEXICAN WASHINGTON PALM.

DISTRIBUTION: DIVISION OF PLANT INDUSTRY RECORDS INDICATE THE FOLLOWING DISTRIBUTION IN FLORIDA: ALACHUA, BAKER, BREVARD, BROWARD, CHARLOTTE, CLAY, COLLIER, DADE, DUVAL, ESCAMBIA, HENDRY, HILLSBOROUGH, JEFFERSON, LEE, MARION, ORANGE, PALM BEACH, PINELLAS, POLK, AND VOLUSIA COUNTIES (SEE MAP).



LIFE CYCLE: TWELVE TO SEVENTY-THREE EGGS ARE DEPOSITED ON THE UNDERSIDE OF THE INTERLEAFING HUSK WHICH SURROUNDS THE LEAFLETS (PINNAE) DURING THE EARLY STAGES OF GROWTH. INCUBATION LASTS NINE TO TWENTY-FIVE DAYS. YOUNG HATCHLINGS FEED ON THE LEAF TISSUE DIRECTLY UNDER THE OLD EGG CASE. THE LARVAE SPIN A WEB OF SILK UNDER WHICH THE COLONY IS PROTECTED AS THEY FEED. INCORPORATED INTO THE WEB IS THE LARVAL FECAL MATTER (FIG. 3). PUPATION OCCURS WITHIN THE WEBBED GALLERIES (FIG. 4A AND 4B).

ECONOMIC IMPORTANCE: INFESTED PALMS ARE SELDOM KILLED BY THIS INSECT. LARGE BROWN SPLOTCHES DEVELOP IN THE LEAF AS THE GREGARIOUS LARVAE FEED (FIG. 5). THE DEAD LEAF AREA AND WEBBED GALLERIES INCORPORATED WITH FRASS DESTROY THE BEAUTY OF PALMS AS ORNAMENTALS AND THEIR USE FOR DECORATIVE PURPOSES.

CONTROL: INFESTED LEAVES AND INTERLEAFING HUSK MAY BE REMOVED AND BURNED, OR PLANTS MAY BE SPRAYED WITH SEVIN 50% WP AT 2 LBS. TO 100 GALLONS OF WATER. EITHER METHOD MUST BE USED PERSISTENTLY.

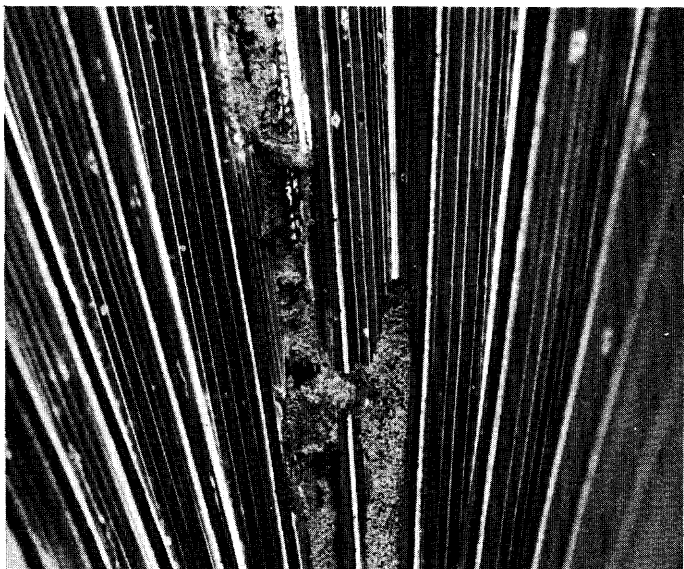


FIG. 3

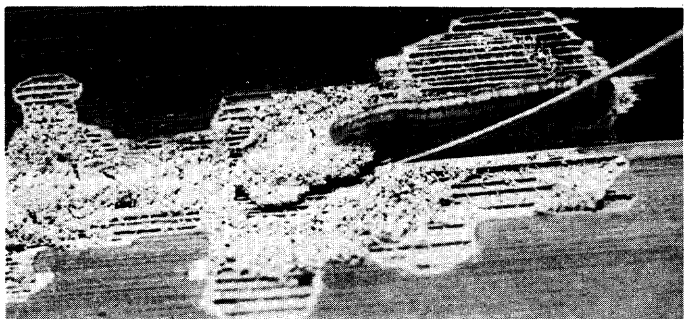


FIG. 5



FIG. 4A



FIG. 4B

REFERENCES:

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- COMSTOCK, J. H. 1880. REPORT OF THE ENTOMOLOGIST OF THE UNITED STATES DEPARTMENT OF AGRICULTURE FOR THE YEAR 1879. (ANN.) REPORT OF THE COMMISSIONER OF AGRICULTURE FOR THE YEAR 1879:209-210.
- CREIGHTON, J. T. 1937. HOMALEDRA SABALELLA CHAMBERS, THE MAJOR PEST OF THE PALMS OF FLORIDA. JOUR. OF ECON. ENT. 30(4):590-595.